# Climate Working Group (CWG) Winter 2018

Climate Working Group SAB Virtual Meeting February 20, 2018





#### **Climate Working Group**

**SAB Co-Liaisons** Term: 2016 (July 1)



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Term: 2015 - 2018 (June 11)



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2nd Term Members: 2013 - 2019 (March 1)



Lesley-Ann Dupigny-Giroux University of Vermont Subjects: Precipitation extremes: geospatial climate; climate services; climate literacy ldupigny@uvm.edu; 802-656-2146



**Philip Mote** Oregon State University Subjects: Regional Climate modeling. impacts, and adaptation pmote@coas.oregonstate.edu 541-737-5694



Raghu Murtugudde University of Maryland Subjects: Ocean's role in climate: Regional earth system predictions; physical-biological coupling/remote sensing/communications mahatma@umd.edu; 301-314-2622



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### Tropical Pacific Subgroup

### **TPOS 2020**

### (#1 Lead the World in Earth System Obs)

The CWG will confer with TPOS 2020 task teams and inform the SAB about developing plans, activities and progress in three project areas: modeling and data assimilation components of the updated observation network; intensive pilot and process experiments for advancing understanding and transition into national observing and modeling capabilities; and the improvement of the backbone of observing system to include additions of biogeochemical and ecosystem parameters.

## Arctic Environment Subgroup

# ARCTIC END to END OBSERVATIONS AND PREDICTION SYSTEMS

(#1 Lead the World in ESO and Wx Prediction)

The CWG will inform the SAB about the plans for an arctic end-to-end observation and prediction system. The CWG will assess and encourage NOAA to connect with the diverse research and operations agencies (NOAA and others) that serve the constituents in the polar region. The CWG will determine the alignment of the current research activities with NOAA's stated strategic Arctic plans and explore the status of more complex ecosystem processes.

## Modeling: S2S and R2O Subgroup

- (#1 Lead the World in ESO and Wx Prediction)
- •The CWG will explore the weakest links in the planned seamless prediction plans for sub-seasonal to seasonal outputs. There will be a focus on predictive skill of extreme events, and in the identification of bottlenecks in the transfer from research to operations and document the methods used to link new S2S products to societal applications.

### Modeling S2S and R2O Subgroup

The NRC 2010 and 2016 reports on "Assessment of intraseasonal to interannual climate prediction and predictability" and "Next Generation Earth System Prediction: strategies for subseasonal to seasonal forecasts" have provided comprehensive assessments and strategies for S2S predictions on

- 1) Best practices; Improvements to the building blocks of forecast systems: Research for sources of predictability
- 2) Engage Users in the Process of Developing S2S Forecast Products; Increase S2S Forecast Skill; Improve Prediction of Extreme and Disruptive Events and Consequences of Unanticipated Forcing Events; Include More Components of the Earth System in S2S Forecast Models

## Climate and Societal Apps Subgroup

- (#2 Minimize the Impacts from Severe Weather)
- The CWG will inform the SAB as it mines NOAA's Climate Portfolio to discern the process by which stakeholders, decision-makers, and social scientists identify user-needs and translate this into NOAA deliverables.
- •Specific attention will be given to the Climate and Societal Interactions Division, which includes the RISAs (Regional Integrated Sciences and Assessments), SARP (Sectoral Applications Research), COCA (Coastal and Ocean Applications), and IRAP (International Research and Applications) programs as the front-line of stakeholder-focused product development and its feedback loop.

#### CWG Plans for 2018

- New TOR to be submitted to SAB (by 2/20)
- Next in-person CWG meeting: May 2018 in La Jolla
- Develop summary documents on approved tasks (for Fall 2018)